



**BOROUGH OF CHATHAM.**

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**Medical Officer's  
Report,**

**1894.**

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**CHATHAM:**

**W. Hutchinson, Steam Printer, 258, High Street.**





## BOROUGH OF CHATHAM.

AREA IN ACRES 4443.298.

POPULATION, (CENSUS 1891), 31657.

MALES 17076. FEMALES 14581.

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TO THE MAYOR AND CORPORATION.

Gentlemen,

I have the honor to submit for your perusal, my Report on the Sanitary condition of the Chatham Urban District, during the year ending December 31st, 1894, together with a summary of the action taken for preventing the spread of disease. I am pleased to state that the Report is of a particularly favourable character, and must encourage you as the Sanitary Authority, to persevere in your efforts to maintain a high standard of Sanitary efficiency throughout your district.

All statistics are calculated on an estimate of the population up to the middle of 1894, based on the assumption that the ratio of increase during the last intercensal period is being maintained during the present one. Very often a population is found to be overestimated, or *vice-versa*, but for practical purposes the number given is probably not far from the truth. The estimated population of your Borough up to the above named period is 33357.

The total number of Births Registered during the year was 902. Males 481, females 421. Birth rate 26.9 per 1000.

During 1893 the Births were 941; and the Birth rate 28.5 per 1000, and it will be seen from a Table embodied in the Report, that the Birth Rate for 1894, is an unusually low one. From causes not well explained, the Birth Rate in towns throughout the country has been steadily falling for several years.

The total number of Deaths Registered during the year was 509, and out of this number 144 occurred in the Public Institutions of the District, viz :—117 in the Medway Union Workhouse, and 27 in Melville Hospital. Some portion of these Deaths belong to other Parishes, and before calculating the rate of mortality, some additions and deductions must be made. The additions are of persons belonging to the Borough, who have died either in St. Bartholemew's Hospital, or in St. William's Hospital at Rochester, and the deductions are the deaths of those persons who died in the Medway Workhouse Infirmary, but who belong either to Rochester or Gillingham.

Thus there were in St. Bartholomew's Hospital 26 Deaths, and in St. William's Hospital 2 Deaths, whilst 29 persons belonging to other localities died in Chatham, 28 being in the Medway Workhouse, and 1 in the Dockyard. The corrected total is as follows—

Deaths Registered	...	509
Additions	...	28
		<hr/>
		537
Deductions	...	29
		<hr/>
		508

Rate of mortality 15·2 per 1000.

The Deaths Registered during each month of the year were in January 71, February 38, March 45, April 43, May 38, June 31, July 34, August 45, September 44, October 32, November 49, December 39.

With the exception of the month of January, when there was a slight recrudescence of Influenza, and a considerable number of Deaths, both from respiratory affections, and amongst the aged, there has been but slight variation throughout the year, and, as will be seen from the following table, which shows the estimated population, Birth and Death Rates for the past eight years, 1894 is by far the healthiest year of which we have record. It also shows that in spite of the increase of population there has been a steady decline in the Birth Rate—this feature being common to the country at large—the Birth Rate having fallen gradually since 1876.



Year.	Population.	Births.	Deaths.	Birth Rate.	Death Rate.
1887	29562	1034	563	35·0	19·04
1888	30086	1009	552	33·5	18·3
1889	30609	956	531	31·2	17·3
1890	31132	972	615	31·2	19·7
1891	31657	932	600	29·4	18·7
1892	32310	973	576	30·1	17·8
1893	32964	941	620	28·5	18·9
1894	33357	902	509	26·9	15·2

The above rates are calculated on the total number of Deaths Registered during each year, and show how considerably the mortality of 1894 is below the average.

The number of Deaths occurring at different ages was as follows—

Under 1 year ...	...	...	...	...	...	...	115
1 and under 5 years ...	...	...	...	...	...	...	43
5 „ 15 „	...	...	...	...	...	...	14
15 „ 25 „	...	...	...	...	...	...	30
25 „ 65 „	...	...	...	...	...	...	176
65 and upwards	...	...	...	...	...	...	131

The grouping into ages is in accordance with the Local Government Table, A which I have filled in and appended to this Report.

In order to more correctly estimate the mortality in different portions of your District, I have divided it into localities, using for this purpose the three Municipal Wards, each of which contains a portion of the Ecclesiastical Parish of St. Paul's. The Medway Workhouse, and Melville Hospital are also treated as separate localities.

The number of deaths occurring in each of these divisions was as follows—

St. Mary's Ward	...	...	...	...	...	...	134
Luton Ward	...	...	...	...	...	...	124
St. John's Ward	...	...	...	...	...	...	107
Workhouse	...	...	...	...	...	...	117
Melville Hospital	...	...	...	...	...	...	27

I have calculated the population in each Ward according to the number of houses on the rate books, and according to this estimate,

which is the only one available for the purpose, the rate of Mortality in each Ward is in

St. Mary's Ward	...	...	...	...	...	13 per 1000
Luton Ward	...	...	...	...	...	10 „
St. John's Ward	...	...	...	...	...	10·4 „

These figures are but a repetition of those in previous years. St. Mary's Ward is more densely populated, has more overcrowding and poverty than either of the other Wards, conditions which invariably increase the rate of mortality.

The Infant Mortality, meaning thereby, the proportion of Deaths under 1 year to every 1000 Births is 127 per 1000, and like the Death rate generally, is remarkably low. The chief disease influencing this Mortality is epidemic Diarrhœa, which usually prevails in the autumn, but from which the past year has been exceptionally free.

Sex. The total number of deaths amongst males was 287, and females 222.

From diseases of the Respiratory Organs, excluding Phthisis, the number of Deaths was 75 as against 73 in 1893, while from Phthisis or Tuberculosis there were 84 Deaths as compared with 94 in the previous year. The Death Rate from Phthisis is 2·5 per 1000.

I have in previous Reports alluded to the infective nature of this malady, and to the conditions which tend to propagate the disease, and although from its long duration, it cannot obviously be subjected to such measures as are applied in the case of Scarlet Fever, or Small Pox, yet there is no doubt that improvement in the Sanitation of towns, such as draining of the subsoil, the demolition of insanitary dwellings, the widening of streets, so as to give increased light and air, and the prevention of overcrowding have a considerable effect in diminishing Phthisis mortality. Other measures which pertain more to those in charge of the individual sufferer, are disinfection and destruction of the expectorated matter, so as to prevent its dissemination in the form of dust, when it becomes dried. The rooms inhabited by such patients should also be kept well aired and free from dust. Milk from tuberculous cows may also be a vehicle of infection, but there is one infallible precaution which can always be taken, and that is to boil all milk before use.



Diseases of the Heart caused 49 Deaths, and 13 Deaths were due to various forms of violence.

Diseases of the Zymotic Class, including 2 who died in St. William's Hospital caused 44 Deaths, as against 69 in 1893; equal to a Mortality of 1·4 per 1000.

As I have before pointed out we cannot accept the Zymotic Mortality as a safe criterion of the health of any district, though I am aware that a popular idea exists that such is the case.

It certainly might be held that a constantly high Death Rate from Epidemic Diarrhœa, or Enteric Fever indicated some defective sanitary condition, yet the occurrence of Diseases of this class is often due to the presence of some temporary or accidental cause, such as the contamination of a water supply, or the consumption of infected milk.

These Deaths were apportioned amongst the following Diseases—Scarlatina 5, Diphtheria 1, Membranous Croup 3, Enteric and Continued Fever 8, Measles 8, Whooping Cough 14, Diarrhœa 5.

The history of this class of disease during the year offers but little of interest. Scarlatina has been reported continuously throughout the year—one hundred and fifteen cases having been notified. Out of this number seventy-nine were removed to St. William's Hospital, and the remainder treated at home. The low mortality shows that the disease has been of a very mild type, and it is this fact which makes it so difficult to stamp out the disease. Many cases of Scarlatina are either wilfully or ignorantly neglected by their parents, no medical advice is sought, and no isolation is practised, with the result of indefinitely propagating the disease. In one case of this description which I recently reported to your Sanitary Committee, the facts so pointed to wilful neglect on the part of the parents, that in the public interest a prosecution was suggested, so as to act as a warning to others, but it was judged inexpedient to follow this advice. It has been suggested that in all cases of absence from school, a certificate of freedom from infection should be produced before the child is re-admitted, but the school authorities are not provided with funds to pay for such certificates, so that it would either become an unfair tax upon parents, or a charitable act on the part of medical men. In all reported cases I always prohibit school attendance until

all risk of infection is passed, but a certificate of this nature would considerably check the spread of the disease from cases that have had no treatment.

Of Diphtheria and Membranous Croup, which many authorities consider to be the same disease, only differing in situation, thirty cases were notified during the year, and four were removed to the Fever Hospital. Inquiries regarding the causation of individual cases, brought to light in some instances the presence of sanitary defects, but in many nothing of the kind existed. Formerly this disease prevailed most in rural areas, and was comparatively a stranger to urban districts, but this incidence has gradually been undergoing a change, and the enormous increase of Diphtheria in urban districts during the past decade has become very noteworthy, and the problem of its causation is one that is engaging the attention of many eminent workers in the field of public health. There seems to be a general consensus of opinion that the progress of compulsory education, by compelling the aggregation of large numbers of susceptible children, has been a potent factor in causing this increase of Diphtheria. Probably this is the case, but of course it only accounts for the increased development of the disease, which is produced by causes at present but ill understood. I may mention in connection with these remarks, that a new method of treatment is now being practised in the case of Diphtheria, which has in many instances been attended by remarkable results. It is known as the "antitoxin treatment," and consists essentially in the injection of blood serum taken from animals that have been rendered immune or tolerant, by repeated injections of Diphtheria poison. The extraordinary amount of interest displayed in connection with this means of treating a terrible disease must be my excuse for mentioning it in a report the primary object of which is to deal with the prevention, and not the treatment of disease.

There were nineteen cases of Fever notified during the year—sixteen being Enteric or Typhoid Fever, two Continued, and one Puerperal Fever. Of the Enteric Fever cases, four were removed to St. William's Hospital, and in every case precautions were taken to limit the further spread of the disease, and inquiries made as to the causation. When sanitary defects were found on the premises they were remedied



as far as possible. The exceedingly small number of cases of this fever is worthy of notice, and speaks well for the sanitary condition of the district.

It will be remembered that during 1893 several cases of Small Pox occurred in the Borough, apparently introduced by a vagrant, and thence spreading to others. The prompt isolation of cases, and the re-vaccination of those persons who had been exposed to infection, soon checked the outbreak, and during 1894 only two cases have been reported. One of these was in the St. John's District, and considering the circumstances, it is surprising that no other case occurred from it. The patient was a lad aged fifteen years, who was ill for three days before his removal to the hospital, during which time he visited a chemist who prescribed for him, but did not recognise the nature of the disease. He then applied to St. Bartholemew's Hospital, where the true nature of his ailment was discovered, and immediately reported. He was promptly removed to St. William's Hospital, and all the remainder of the family, nine in number, were re-vaccinated, kept at home, and the necessary measures of disinfection carried out, with the result that no second case occurred. The other case reported was in the Luton District, in a child of three years of age. This was also removed to the hospital, but was found to be chicken pox, and discharged.

Of Erysipelas seventy-eight cases were notified. In my last report I made some remarks on the notification of this disease, and I regret that you have no power to expunge it from the list of notifiable diseases.

Altogether two hundred and fifty cases were reported under the Infectious Diseases Notification Act, the bulk of them being due to Scarlatina or Erysipelas.

There are some other diseases which are not notifiable, but which have been present in your district during the past year. First in order is Measles, which prevailed rather extensively during the first three months of the year, and led to the temporary closure of one of the Schools in the district, a measure which had a considerable effect in limiting the spread of infection. In all, eight deaths occurred from this disease, the bulk of them being in St. John's Ward.

Whooping Cough has been the most fatal of Infectious Diseases during the year, fourteen deaths being registered from this cause. There is no disease about which more misconception and ignorance exists, and a large section of the public persistently do what they ought not to do, with children who are suffering from it. The little sufferers are recklessly taken out of doors, under the mistaken idea that they will thereby derive benefit, and two evils occur, one is that the infection becomes more widely spread than it would be if isolation were practised, and the other is that in consequence of exposure to cold, Bronchitis or Pneumonia supervenes, and a fatal termination ensues, which a little timely care and common sense would avoid.

The low temperature prevailing during the summer had the merit of checking the usual epidemic of Infantile Diarrhœa, which generally appears in July and August, and only five deaths were registered from this cause, as compared with forty-five in 1893. In order to more successfully cope with an invasion of Cholera, the Local Government Board issued a circular dated July 16th, 1894, giving to sanitary authorities permission to make Diarrhœa a notifiable disease, and confining the notification to cases above one year of age. As there was no prevalence of Diarrhœa, and climatic conditions were against its appearance, I advised you not to include it in the Schedule, and fortunately nothing has occurred to make you regret not having adopted the course suggested in the circular.

The great scourge of the past three years was almost entirely absent in 1894. I refer to Influenza, which had directly and indirectly caused an enormous mortality since the beginning of 1890.

At one period of the year, in consequence of the large number of cases of Scarlet Fever both in Chatham and Rochester, the need of extra accommodation at the Joint Infectious Hospital was seriously discussed, and for a time the existing buildings were so full that admittance was refused to all cases other than Scarlet Fever. The public are not slow in perceiving the benefits conferred on them by such an institution, and every year there is a growing tendency to remove infectious cases to this Hospital, and I feel sure that directly an epidemic of large dimensions occurs, the present resources of the Hospital will be quite inadequate to meet the demand.



The Water supply of the district continues to be of a highly satisfactory character, abundant, and very free from organic impurity, but of extreme hardness. I endeavoured a few years ago to bring about the adoption of some softening process, which there is no doubt can be done, and after the primary expense of erecting plant, can be done cheaply. The working expenses would be small, but the saving to the public would be so great as to more than compensate for any extra charge the Water Company might make, besides which no person can gainsay that for comfort in use, soft water is far superior to hard water.

There are now but very few wells in the Borough, and what there are have been examined from time to time. Surrounded as they are by cesspools, it is only a matter of time for those which are at present pure, to become contaminated.

The Slaughterhouses through out the District have been periodically inspected. Many of them are not in desirable situations, from a Sanitary point of view, but the owners are always willing to do whatever is suggested in order to minimise any nuisance, and generally speaking, the slaughterhouses are well kept and clean.

With respect to the Common Lodging Houses, which are regularly inspected, I have invariably found that the proprietors are careful to adhere to the Regulations framed in the Public Health Act, for the well ordering of such places.

The same remarks apply to the Inspection of Bakehouses, Dairies, and Cowsheds, and to Workshops, the supervision of which now devolves upon Sanitary Authorities. All Workshops, where steam, water, or other power is used for manufacturing, remains under the supervision of the Factory Inspectors. I have recently caused a complete inspection of premises of this kind to be made, and in many cases there are defects, some of which will probably have to be brought to the notice of your Sanitary Committee.

I have constantly alluded to the need for supplying Bye-Laws to the owners of Slaughterhouses and Common Lodging Houses, and I venture again to suggest that the whole subject of Bye-Laws should



receive the consideration of the Council. The Bye-Laws of the late Local Board of Health have been adopted, but the whole subject requires attention. Model Bye-Laws have been drawn up by the Local Government Board for the guidance of Sanitary Authorities, which may be either adopted in their entirety, or modified to the needs of the District seeking to frame Bye-Laws.

The system of emptying Cesspools by means of pumps, which has now been in operation for two or three years, is a very great improvement on the disgusting system of emptying by hand. Not only is the sewage removed more frequently, but the nuisance attendant on the process has been reduced to a minimum, and the difference is most realized in the poorer quarters of the town, where the old system formerly caused a most pestilential nuisance, the absence of which, must be a gain to all living in its vicinity.

During the past year many complaints have been received respecting the non-removal of House Refuse. It is most important that this should be regularly taken away, particularly in the poorer quarters of the town; and if the plan which has been drawn up for the guidance of the men charged with this duty, be systematically followed, then there need be no difficulty in the matter.

Besides the inspections of premises mentioned above, much other useful Sanitary Work has been carried out during the year, and in many cases I have forwarded Special Reports to your Sanitary Committee. Not the least important item in the Sanitary Administration of your District, which has been carried out during 1894, has been the watch kept upon the food supply of the Borough, and in some instances unwholesome fish has been detected and destroyed, without the necessity of a magistrate's order.

Appended are the following Tables—

TABLE A. Showing Deaths during the year 1894, classified according to Diseases, Ages and Localities.

TABLE B. Showing Population, Births and new cases of Sickness during 1894, classified according to Diseases, Ages and Localities.

TABLE I. Showing Births, Deaths and rate of Mortality in 1894.

TABLE II. Showing Deaths from all causes, and from certain special causes during each quarter of 1894.

TABLE III. Inspectors' Report of Sanitary Work completed during 1894.

I remain, Gentlemen,

Your obedient Servant,

CHATHAM,

J. HOLROYDE,

*February, 16th, 1895.*

Medical Officer of Health.



INSPECTOR'S REPORT OF WORK IN SANITARY  
DEPARTMENT FOR THE YEAR 1894.

		No. of complaints received for non-removal of ashes	Very many
		No. of inspections of houses, premises, &c. ...	... 200
Results of Inspection.		Orders issued for sanitary amendment of premises	... 109
		Houses cleaned, repaired, and white-washed ...	... 7
		Houses disinfected ... ..	... 118
		Wells closed ... ..	... 0
House Drains.		Drains tapped ... ..	... 130
		Drains cut off from cesspool ... ..	... 7
		Drains cleared and ventilated... ..	... 29
Privies and W.C's.		New cesspools provided ... ..	... 36
		Cesspools repaired ... ..	... 11
		New privies provided ... ..	... 17
Dust Bins		New dust-bins provided ... ..	... 60
Miscellaneous.		Removal of offensive accumulations ... ..	... 14
		Removal of Animals improperly kept ... ..	... 4
		Seizures of unsound food ... ..	... 3
		No. of Lodging Houses registered ... ..	... 12
		No. of Bakehouses ... ..	... 35
		No. of Cowsheds licensed ... ..	... 18
		No. of Slaughter-houses .. ..	... 18
		Manure pits provided ... ..	... 2
		No. of Workshops inspected ... ..	... 35
		The delivery of Fish at the London, Chatham and Dover Railway Station is inspected daily.	



TABLE I.

Showing Births, Deaths, and Rate of Mortality in 1894.

Annual Rate of Mortality per 1000, from							
Births.	Deaths.	Birth Rate.	All Causes.	Severe Principal Zymotic Diseases.	Phthisis.	Lung Diseases.	Heart Disease.
902.	509.	26·9.	18·2.	1·4.	2·5.	1·3.	1·4.

TABLE II.

Showing Births, Deaths from all Causes, and from certain Special Causes, during each Quarter of 1894.

Quarter ending	Births.	Deaths.	Deaths from			
			Severe Principal Zymotic Diseases.	Phthisis.	Diseases of Lungs.	Heart Disease.
March 31st.	248	154	7	21	30	12
June 30th.	201	112	10	13	23	12
September 30th.	212	123	19	28	10	11
December 31st.	241	120	8	22	12	14

(A.) Table of Deaths during the year 1894, in the Chatham Urban District, classified according to Diseases, Ages and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Under 5	Scarlatina.	Diphtheria.	Membranous Group.	Enteric or Typhoid Fever.	Continued Fever.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phtthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	Total.	
St. MARY'S WARD .. .. .	134	50	14	4	8	37	21	Under 5 ..... 5 upwds.	1 .....	1 .....	1 .....	.....	.....	1 .....	6 .....	3 .....	1 .....	1 .....	5 .....	16 .....	1 .....	1 .....	31 .....	64 .....
LUTON WARD .. .. .	124	28	17	5	5	43	26	Under 5 ..... 5 upwds.	1 .....	.....	1 .....	.....	.....	.....	5 .....	.....	1 .....	.....	2 .....	7 .....	.....	1 .....	29 .....	47 .....
St. JOHN'S WARD .. .. .	107	32	10	4	8	27	26	Under 5 ..... 5 upwds.	.....	.....	1 .....	1 .....	.....	.....	5 .....	3 .....	1 .....	.....	2 .....	5 .....	.....	.....	24 .....	42 .....
MEDWAY WORKHOUSE.. ..	117	5	2		2	52	56	Under 5 ..... 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1 .....	1 .....	.....	.....	5 .....	7 .....
MELVILLE HOSPITAL (Naval).	27			1	7	17	2	Under 5 ..... 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9 .....	.....	.....	.....	.....	.....
TOTALS .. .. .	509	115	43	14	30	176	131	Under 5 ..... 5 upwds.	2	1	3	1	1	2	14	5	1	10	29	46	48	11	151	345
THE SUBJOINED NUMBERS HAVE ALSO TO BE TAKEN IN TO ACCOUNT IN JUDGING OF THE ABOVE RECORDS OF MORTALITY.																								
Deaths occurring outside the district among persons belonging thereto.	28	2	2	2	1	19	2	Under 5 ..... 5 upwds.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	2	4
Deaths occurring within the district among persons not belonging thereto.	29		1			12	16	Under 5 ..... 5 upwds.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	2	20	28



(B.) Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1894, in the Chatham Urban District; classified according to Diseases, Ages and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separate localities.	POPULATION OF ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES IN SICKNESS IN EACH LO- CALITY, COMING TO KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										CASES REMOVED FROM HOMES IN SEVERAL LOCALITIES FOR TREAT- MENT IN ISOLATION HOSPITAL.			
	Census 1891.	Estimated to middle of 1894.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	Enteric or Typhoid Fever.	Continued Fever.	Puerperal Fever.	Erysipelas.	Smallpox.	Scarlatina.	Diphtheria.	Enteric Fever.		
St. MARY'S WARD .. .. .		10345		Under 5 ..... 5 upwds.	...	22	2	...	...	...	...	8	...	19	1	...	...	
LUTON WARD .. .. .		12697		Under 5 ..... 5 upwds.	1	12	8	...	3	1	...	7	...	4	1	...	1	
St. JOHN'S WARD .. .. .		10315		Under 5 ..... 5 upwds.	...	8	3	...	1	3	...	2	...	7	...	...	...	
MEDWAY WORKHOUSE.. ..				Under 5 ..... 5 upwds.	1	14	11	...	...	1	...	12	...	9	1	...	...	
MELVILLE HOSPITAL .. ..				Under 5 ..... 5 upwds.	...	6	1	...	...	1	2	7	...	...	...	...	...	
TOTALS .. .. .	31657	33357	902	Under 5 ..... 5 upwds.	1	42	13	4	4	4	...	17	1	30	2	1	2	



